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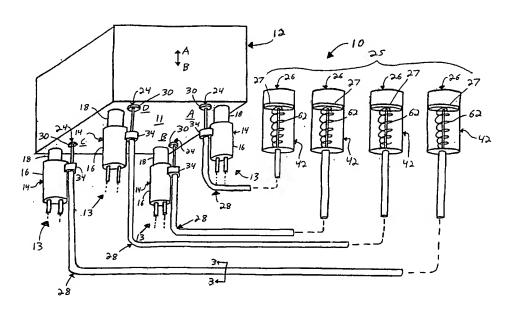
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(54) Title: MECHANICAL LIFT MEASUREMENT SYSTEM



(57) Abstract: A lift measurement system includes a scale (26) and movable indicator (27) where a linkage (24) is provided that transmits movement of the lifted load to the scale. A plurality of displays and linkages are installed at various zones to show relatives positions.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/09436

IPC(7) : COLC 9/00 US CL : 33/365 According to International Patent Classification (IPC) or to both national classification symbols) US CL : 33/365 According to International Patent Classification system followed by classification symbols) U.S.: 33/333, 365, 367; 177/145,146; 187/394; 234/1, 89R, 90-92, 89H  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched classification symbols) U.S.: 33/333, 365, 367; 177/145,146; 187/394; 234/1, 89R, 90-92, 89H  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched data base consulted during the international search (name of data base and, where practicable, search terms used)  C. DOCUMENTS CONSIDERED TO BE RELEVANT  Category*  Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.  A US 4,925,424 A (de la Haye) 02 December 1986 (2.12.1980) All  A US 4,625,424 A (de la Haye) 02 December 1986 (2.12.1980) All  A US 4,686,773 A (Brewer) 18 August 1987 (18.08.1987) All  A US 4,169,320 A (Bennett) 02 October 1979 (2.10.1979) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27.02.1990) All  A US 4,903,946 A (Suzk) 27 february 1990 (27	A. CLA	SSIFICATION OF SUBJECT MATTER			<del></del>	
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Further documents are listed in the continuation of Box C.  Special categories of cited documents:  "T"  Later document defining the general state of the art which is not considered to be of particular relevance:  "E"  earlier application or patent published on or after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention cannot be considered novel or cannot be considered novel or cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone  "V"  document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is constituted to involve an inventive step when the document is constituted to involve an inventive step when the document is constituted to involve an inventive step when the document is constituted to involve an inventive step when the document is constituted to involve an inventive step when the document is constituted to involve an inventive step when the document is constituted to involve an inventive step when the document is constituted to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed to	Α	US 4,169,320 A (Bennett) 02 October 1979 (2.10.1979) All			AII	
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"A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed  Date of the actual completion of the international search  19 August 2004 (19.08,2004)  Name and mailing address of the ISA/US  Mail Stop PCT, Atm. ISA/US  Commissioner for Patents  P.O. Rox 1450  Alexandria, Virginia 22313-1450  Facsimile No. (703) 305-3230	• S <sub>1</sub>	pecial categories of cited documents:	*T*		emational filing data or prioring	
"C" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed  Date of the actual completion of the international search  19 August 2004 (19.08.2004)  Name and mailing address of the ISA/US  Mail Stop PCT, Attn: ISA/US  Commissioner for Patents  P.O. Box 1450  Alexandria, Virginia 22313-1450  Facsimile No. (703) 305-3230  Accommendation or other means inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family  Authorized officer  Randy W. Gibson  Telephone No. (703) 272-2815	"A" document defining the general state of the art which is not considered to be of particular relevance			date and not in conflict with the application but cited to understand the		
establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed  Date of the actual completion of the international search  19 August 2004 (19.08.2004)  Name and mailing address of the ISA/US  Commissioner for Patents  P.O. Rox 1450  Alexandria, Virginia 22313-1450  Facsimile No. (703) 305-3230   document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the arr  document member of the same patent family  Date of mailing of the international search report  18 NOV 2004  Authorized officer  Randy W. Gibson  Telephone No. (703) 272-2815	· · · · · · · · · · · · · · · · · · ·		*x*	considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y"  document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is		
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